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ABSTRACT

The relative rigidity of instructional method, the intensity of supervision, and the size of instructional group are the three variables investigated in a study of students' feelings towards their preservice teaching experiences. Approximately 250 education students were queried regarding the kind and amount of supervision they were accorded during their experiences in the field. Results indicate that students receiving less supervision were correspondingly less satisfied with their preservice training. (LH)

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Varying Formats of Teaching Undergraduate Field Courses: An Experimental Examination

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Varying Formats of Teaching Undergraduate Field Courses:

An Experimental Examination

Research on the teaching of undergraduate courses has been the subject of discussion for over fifty years. It appears that much research on teaching falls into one of four major categories. The earliest recorded research on undergraduate research, as reviewed by McKeachie (1967) focused primarily on the effect of class size on academic learning. Studies of Edmondson and Mulder (1924) and Hudelson (1928) reported findings which favored the large class over the small class. However, after these studies, support for small classes began to appear far more frequently (e.g., Feldhusen, 1963; Macomber & Seigel, 1960; Husband, 1951). A second area of frequent research is the controversy between lecture learning and discussion sections. The lecture was usually criticized on all accounts except economy; discussion methods usually received more support for their placing of the students in active learning stances, their use of practice and feedback and ability to use group variables. A third category of teaching research focuses on student-centered versus instructor-centered teaching. This research tried to evaluate whether goals generated by the students enhanced learning more than goals selected by the instructor. McKeachie (1965) reported that most research showed that student-centered learning was superior to instructor-centered learning in such areas as application of concepts, attitudes and group skills. Finally, with the advent of computer-based teaching and programmed learning, a fourth area for teaching research has blossomed. Research is inconclusive at this time, due to lack of systematic evaluation, but programmed learning's place as at least an aide in "rote" work is well entrenched. (McKeachie (1967) reviewed research in these and other areas of college teaching in great detail. The reader is referred to this article for an excellent summary.)

Much of the research specifically dealing with the teaching of undergraduate psychology deals with a large, introductory courses (e.g., Birney & McKeachie, 1955;

Daniel, Dunham & Morris, 1965; Wolfle, 1942). However, due to ever-increasing college enrollments, old methods of teaching no longer are satisfactory to many. Maier (1971) stated, ". . . many innovations are needed. We cannot expect our present methods of teaching to be maintained." (p. 722) In response to this problem there are many innovations occurring in upper-level psychology courses. In the last ten years, undergraduate psychology departments have been under fire to move away from the classroom and into the community (Baskin, 1967). Psychology majors needed a place to test out their ideas against real experience. In a survey of psychology department chairmen, Kulik (1973) found almost 16% of the 351 innovations noted in psychology involved a field experience of some kind. Kulik pointed out, "In such field experiences, students get first-hand experiences of important data bases of psychology, observe professional models and explore tentative career commitments." (p. 202)

This increased interest in field experiences for undergraduate psychology majors dovetails very neatly with the flourishing use of nonprofessionals in human service settings. Since the 1960's, there has been a great increase in the number of programs using nonprofessionals as intervention agents with various target populations (Brown, 1974; Cowen, 1973; Durlak, 1971; Rappaport, 1977; Sobey, 1970). There are four major reasons for this proliferation. First, the use of nonprofessionals was a result of the increasing demand for mental health services and a shortage of professional workers. Albee (1959) was especially influential in focusing upon this issue and sensitizing mental health workers to the need for generating new sources of personpower and new delivery systems of mental health care. Since it was clear even at that time that there could never be enough professionals to meet the ever growing demand, the use of nonprofessional personnel was considered as a potential alternative. In fact, nonprofessionals were thought to be the key to providing more complete mental health coverage to the entire population (Gruver, 1971).

Secondly, nonprofessionals were thought to bring a number of unique characteristics to the human service endeavor. Such characteristics as enthusiasm, desire for involvement, refreshing naivete, new points of view, role flexibility, etc. (e.g., Korchin, 1976; Poser, 1966; Rappaport, Chinsky & Cowen, 1971). In addition, the professional "reach" of the human service fields could be expanded to populations that professionals did not generally choose to work with--e.g., lower class patients, delinquents, chronic institutionalized inpatients (Durlak, 1971; Gruver, 1971). Nonprofessionals were said to bring a new style of service delivery, more far reaching in its impact. Third, the use of nonprofessionals was justified on the basis of the helper therapy principle (Riessman, 1969), which stated that those who help also receive benefits from their participation. Thus, the use of nonprofessionals as therapeutic change agents was seen as a potential means of improving the mental health of the helpers themselves. Finally, the use of nonprofessionals is relatively inexpensive when compared to the use of an equal number of professionals. With the employment of more nonprofessionals offering direct service, professionals could move out of traditional roles and away from one-to-one service. Professionals were able to expand their roles and impact by training, supervising and consulting with numerous nonprofessionals. These four factors have helped to firmly entrench the use of nonprofessionals in human service settings.

The use of undergraduates in field experiences, placing them as nonprofessionals in the mainstream of human service settings, seems to benefit all concerned--the university, the student and the target individuals (Gruver, 1971; Poser, 1966; Durlak, 1971, 1979). However, the field work supervisor is frequently left with little sound research with which to instigate his/her practicum supervision. Kulik (1973) stated, "If students are to profit from (field) experiences, techniques for coordinating field experiences with classroom learning must be discovered. What seems likely is for faculty who are actively developing field

training to share ideas regarding the substantive issues . . . ." (p. 209) With this in mind, the study reported herein was formulated. An attempt was made to begin to study a few aspects of the undergraduate field work settings systematically. For example, does the frequency of supervision and teaching meetings have any impact upon students toward their experiences in the class? Is imposing a specific academic content upon students the optimal method of enabling the students to feel they are obtaining a worthwhile experience, or will they be happier and feel they have learned more if they are allowed to evolve their own "natural" skills? Does group size have impact upon the students' perceptions of their experiences in field work?

In response to this set of questions, this study was designed to begin to explore two components which can be varied from one field practicum to another: field experience focus or content, and supervision intensity. First, the content of the field training/intervention strategy was varied. One of the training/supervision sequences chosen reflected an "action" focus. This strategy featured training the undergraduates in behavioral contracting and child advocacy. Reviews of behavior modification programs which used juvenile delinquents as target populations (Braukman & Fixsen, 1976; Davidson & Seidman, 1974; Nietzel, Winett, MacDonald, & Davidson, 1977) highlighted the lack of systematic research in this area. However, an overall pattern of positive results with these behavioral techniques was indicated. Also, one study (Davidson, Seidman, Rappaport, Berck, Rapp, Rhodes, & Herring, 1977) compared child advocacy techniques to behavioral contracting. Both of these approaches had very positive results when compared to no-treatment controls. On the basis of the success of both approaches, it was decided to use a combination of both strategies for one practicum sequence. The second practicum strategy was selected to reflect the most frequent content that has been used in training nonprofessionals; it was based on theoretical constructs outlined by Rogers (1957) about the necessary and sufficient conditions

for effective therapeutic relationships. This strategy focused on developing interpersonal skills such as empathy, confrontation and self-disclosure. Many believed that this was an essential first step in the helping process (Danish & Brock, 1974; Danish & D'Augelli, 1976; Danish & Hauer, 1973; Truax & Carkhuff, 1967). The third field work sequence utilized in this study was based on the rationale that nonprofessionals bring a variety of unique characteristics to the helping relationship. Working from this assumption there are some who believed that training nonprofessionals would only wash out their uniqueness, thereby making them less effective (Durlak, 1971; Korchin, 1976). Hetherington and Rappaport (1967) decided to eliminate training their workers, believing this enhanced the workers' effectiveness. Studies such as the one done by Poser (1966) demonstrated that undergraduates with no training at all could promote change in psychological functioning of chronic schizophrenic patients. Thus, the third field work strategy focused mainly upon the natural skills of the undergraduates, providing only basic knowledge deemed necessary to orient the students to the program.

A second component of field experience supervision varied in this study was the intensity of the training/supervision. Often when conclusions were made about the success and failure of a particular content of training/supervision used with nonprofessionals, issues about the appropriateness of the amount of time devoted to the training/supervision of the particular content have been overlooked or minimized (e.g., Linden & Stollak, 1969). Yet, it was stated that the question of too much versus too little training is a critical one for the nonprofessional (Report of the Joint Commission, 1969). Thus, here, two aspects of the intensity of the field work supervision strategy were varied. First, the frequency of supervision meetings was varied (once a week versus one a month); secondly, the size of the classes was altered (six or seven per group versus fifteen per group). Thus, not only time spent in the classroom was examined here, but also the amount of time spent per person was scrutinized.

Results linking these manipulations to outcome (i.e., recidivism) of the target population are reported elsewhere (Kantrowitz, 1979; Kantrowitz, Blakely, Kushler & Davidson, 1978). The study reported here was concerned with the effects of varying field experience supervision with respect to student perceptions of and satisfactions with the experience. The design of this study was a modification of the most complete design possible, given the above two components which were varied. Ideally, a 3x2x2 design would have been employed, completely crossing all factors: three field work training/supervision sequences x two frequencies of meeting x two group sizes. However, due to the large N which this design would have required in order to be experimentally valid, the design presented herein is only partially crossed. As a beginning, in this study the extremes of the components were examined: high intensity training was coupled with either behavioral contracting/child advocacy or relationship skills training: low intensity training was coupled with the "natural skills" approach to intervention. Thus, in some senses, the results reported are tentative and exploratory; they begin to shed light on the effects of some aspects of field experience supervision on undergraduates' perceptions of their experience rather than the offering of definitive answers to optimal conditions.

Method

Context of the Research

This study took place within the context of a larger research project funded by the National Institutes of Mental Health. The overall project had already been in formal operation for over a year at the start of the present study and was aimed at replicating and experimentally examining a diversion project for delinquent youth (Davidson, 1976; Davidson & Rapp, 1976; Davidson, et al., 1977; Davidson & Rappaport, 1977; Seidman, Rappaport, Davidson & Linney, in press). College students, working on a one-to-one basis with a diverted youth, served as nonprofessional change agents. The overall research project examines such com-

ponents of the diversion model as the degree of involvement of the youth with the juvenile justice system at the time of referral, characteristics of the college students, selection of nonprofessionals and the scope of the intervention approach.

The entire study operated under the educational pyramid model (Seidman & Rappaport, 1974). The project director supervised, trained and consulted with the nine graduate and two undergraduate students who had responsibility for training and supervising the small groups of undergraduates and for the coordinating of the study research. The field work training and supervision segment was a formal three-term undergraduate psychology course. In addition to the study's relationship to the university and psychology department, there were close ties with the local police department and the local juvenile justice system. The juvenile court saw approximately 500-600 youthful offenders during 1977-78. It was from this group that targets were selected.

Subjects

In the spring of 1977 a letter was sent to 3500 social science majors announcing the availability of a three-term psychology field experience sequence. 450 students called and were told the time and location for the first information/assessment meeting. Approximately 300 students attended this session. Students were given a general description of the study and the extensive evaluation that would be required of them over the course of the year. The students who were still interested in participating, approximately 250, were asked to fill out several paper and pencil measures. They also signed contracts expressing intent to be in the study and to be available for further assessments in one year. Since there were many more students than could be accommodated in the course, it was explained that students would be picked at random to participate and while the contracts required students to fill out further assessments, it did not guarantee admittance. A second pre-selection meeting was scheduled so that students could complete a second battery of measures; 134 students attended. They were told that they would be informed over the summer of their status.

Of the 134 undergraduates who completed the entire pre-assessment battery, 51 were males and 83 were females. Fourteen males and 14 females were selected at random (stratified by sex) for the high intensity conditions; 15 males and 15 females for the low intensity conditions. Twenty-two males and 27 females were placed in a waiting/control group; the remaining 27 females were rejected. (In this study, however, no further use was made of controls). Letters were sent out to all those who were accepted in the experimental conditions, asking them to return a card indicating their continued desire to take the course. Seven refused; they were replaced by a same sex individual chosen at random from the waiting list/control group. Once the class list was finalized, letters were sent to all those on the control and reject lists informing them of their status. The 14 males and 14 females in the high intensity condition were then randomly assigned to one of four high intensity classes. The 15 males and the 15 females in the low intensity conditions were assigned at random to either one of three classes. Thus, the study consisted of two experimental conditions of seven classes and one control condition.

On the first day of class, one of the students assigned to the high intensity condition notified the director of her intention not to participate in the course. Due to the limited time available to find a replacement before class began, a decision was made not to replace her. The high intensity condition dropped to 25 students when two students dropped the course. One student in the low intensity condition decided to drop out of school completely during the middle of the second term. These three students were not included in the analyses.

Target Population

A youth was eligible for referral to the study if (1) he/she had a court petition filed against him/her by police, school, parents or others; (2) the court accepted the petition; and (3) during the inquiry and preliminary hearing the youth admitted to the charges presented against him/her. This study did not accept

youth who were involved in only a single minor offense or who would have been dismissed by the court.

Seventy-five delinquent youth were referred to the study from October, 1977 through January, 1978. Four youth decided that they did not want to participate. The youth who decided that they wanted to be a part of the study had the following characteristics: 60 were males and 11 were females; 51 were white and 20 were nonwhite; the average grade level was ninth grade with a range of fifth to twelfth; 65% of the youth came from broken homes; and the average age was 14.3. Criminal activities ranged across the full spectrum, but tended to be nonserious and serious misdemeanors and nonserious felonies. Stratified by court referee, race, sex, formal or informal handling of case and order of referral, the youth who decided to participate were randomly assigned to one of the experimental conditions or to the control condition. Within the conditions, students were assigned to their youth according to interested, sex preference, and transportation needs.

Experimental Conditions

High intensity field experience conditions. Each of the four high intensity classes (two Action, two Relationship) were composed of six or seven students and two graduate student supervisors. Each class met for two hours weekly. The first eight weeks of the fall term were designated the formal training segment and students were expected to master outside readings and the content of the training manual for their class. All training material was broken into eight one-week units; learning of the material was based on the mastery model (Keller, 1974) through weekly oral and written quizzes. In addition to this, mastery of the subject matter was demonstrated in class through homework assignments, roleplays, and class discussions.

After the training component was completed, the classes were used solely for case supervision. Since students were assigned cases as early as the fourth week of training, part of each training session became supervisory in nature as well.

The structure, general format, and class size of the two high intensity conditions were similar. However, the content of the training, supervision, supervision philosophy and the intervention model were very different.

(1) Action field experience conditions (n=14). Training in the "Action" condition consisted of theoretical rationales for behavioral and environmental conceptions of human behavior and delinquency, assessment of the youth's environment, methods of selecting and initiating an intervention strategy, how to monitor the intervention selected and how to terminate involvement with the youth (Alexander & Parsons, 1973; Davidson & Rapp, 1976; DeRici & Butz, 1975; Stuart, 1971; Tharp & Wetzel, 1969). Training centered around a specifically designed manual, broken into eight units: (1) behavioral conception of human behavior and delinquency; (2) environmental resources conception of human behavior and delinquency and the rationale for multi-level training for work with the youth; (3) assessment as a prelude to intervention; (4) assessment in practice; (5) selection and initiation of intervention; (6) contracting and advocacy intervention in practice; (7) monitoring intervention; and (8) termination/generalization/overview.

Once the eight weeks of formal training were completed, the two-hour weekly class period for the remainder of the three terms (30 weeks) was spent in supervision. Each student presented what he/she had learned about his/her youth during the last week. In working with the youth, students were expected to meet for six to eight hours per week with the youth in order to assess the youth's situation, chose and implement either a behavioral contract or an advocacy strategy, work in conjunction with the supervision group and the significant others of the youth and monitor the intervention's impact. Supervisors and classmates helped the student to clarify and understand the new information and accomplishments as well as to plan the next steps and develop overall goals for the youth.

(2) Relationship field experience condition (n=12). "Relationship" training covered theoretical rationales behind the interpersonal conception of human behavior

and delinquency, the essential ingredients of a therapeutic relationships, ways of establishing a trusting, facilitating relationship, the role of crises in relationships, self-understanding, the development of empathic and clarifying responses, the importance of constructive openness, facilitating autonomy in the problem-solving process (Carkhuff, 1969a; Goodman, 1972; Gordon, 1970; Rogers, 1961). Again, all training was broken into eight one-week units; learning of the material here as well was based on the mastery model as exhibited through weekly oral and written quizzes.

The supervision structure closely paralleled that of the Action condition, for once formal training ended, the two-hour weekly class sessions for the remainder of the three terms were spent in the supervision of cases. Students, with the help of supervisors and fellow classmates, clarified what they had learned about their youth during the last week and how they felt about that. Students were expected to spend six to eight hours per week with their youth and to engage in activities and behaviors that would help establish comfortable, trusting relationships. Once important issues and problems were identified, the students went through the problem-solving process together with their youth, to help them to define and explore the problems and their feelings more fully, to develop alternatives and to plan how the youth might implement the change. In order to enhance the youth's autonomy, the students were not to be involved in initiating action with others on behalf of their youth.

Low intensity field experience condition. The low intensity conditions modeled in several respects the type of training and supervision often provided in a volunteer-in-court program. "Court volunteer training is rarely elaborate, intensive or formal . . . the average seems to be about five to ten hours, spread over two or three consecutive evenings in one week or once a week over several weeks" (Scheier & Guter, 1971). There is generally both an orientation period for providing a core of necessary information and a training period for discussing more detailed knowledge about the specific job.

(1) Small group field experience condition (n=14). The "Small" condition included three two-hour orientation meetings held during the first three weeks of the term. These meetings, primarily didactic, included a general introduction to the program, lectures on theories of delinquency and on the justice system and court, an overview of what students might do with the youth and the importance for being supportive of their youth. Supervision sessions in this condition were two hours in length and held monthly for the remainder of the three terms. The overall philosophy in supervision was that the interest, commitment and high level of motivation and enthusiasm of volunteers could have positive impact on the youth without the need for more specific training or supervision. Supervision was to be a time for idea exchange and problem-solving discussions; questions and issues raised by the students were to be explored with the class as a whole. Supervisors were to summarize and integrate discussion and to reflect the comments and questions of the students. Students in the small condition met in two groups of seven.

(2) Large group field experience condition (n=15). The "Large" condition was identical to the small condition except that this group had 15 students meeting together in both training and supervision segments.

Therefore, using these four conditions, the impact of three aspects of field experience supervision could be scrutinized: content of academic training (action-oriented vs. relationship-oriented vs. nonspecific); intensity of training and supervision (once a week vs. once a month); and group size (6 or 7 per group vs. 15 per group).

Design

This study utilized a post-only repeated measures design. This was chosen mainly because, conceptually, there was little meaning to the administration of a course evaluation measure attempting to elicit people's responses to specific aspects of an experience prior to their involvement in that experience. Thus,

the measure was administered at two time periods: after the first 10 weeks of the course (time 1) and upon completion of the entire 30-week course (time 2) (see Table 1).

Measures

An extensive Course Evaluation questionnaire was generated and given at time 1 and time 2. Since enthusiasmm morale, etc. have been seen as characteristics which nonprofessionals possess and which help to make them successful (e.g., Durlak, 1971), it was thought to be important to examine how such factors as satisfaction with the field work approach and class structure affected the levels of these characteristics. All questions were in the form of a 5-point, Likert-type scale.

The Course Evaluation measure was given to students in all conditions in order to measure satisfaction, feelings and attitudes about the training, course and experience. On the basis of principal components/varimax rotation procedures and using Kaiser's criteria, six orthogonal components were extracted (see Table 2). The first, Evaluation of Academic Course Learning, contained items reflecting how much the students felt they learned and how the course would affect their future, in terms of going to grad school and getting a job. The second, General Course Evaluation, was composed of such questions as whether they would take the course again or recommend the course to a friend. The third, Evaluation of Didactic Training, had items evaluating the training and intervention models. The fourth, Evaluation of Class Discussion, consisted of items reflecting the usefulness and feeling about class discussion of cases. The fifth, Social Support Received, was composed of items reflecting the amount of time spent talking with other students and friends about the course and cases. The sixth, Evaluation of Grading Scheme, was a single item dealing with how much the grading scheme of the course was liked.

Results

Course Evaluation

Due to the orthogonality of the components generated, a series of univariate analyses of variance were conducted using each component. Six components of the Course Evaluation measure given to all students were analyzed using a 4x2 (condition by time) analysis of variance design. All comparisons were computed using the Scheffe test and only those which reached a significance level $p < .05$ were reported here.

The summary of the analysis of variance and the groups means for the Evaluation of Academic Course Learning scale are presented in Table 3. A significant main effect for condition is observed. There were no significant differences between groups at time 1, but by the time 2 assessment (end of project) Action, which remained stable over time, was significantly higher than Large, which dropped over time. As well, Action and Small combined were significantly higher than Relationship and Large.

Table 4 contains the summarized analysis of variance findings and the groups means for the General Course Evaluation scale. A main effect for time was significant. As with the Evaluation of Academic Course Learning scale Action remained stable over time. Relationship, Small and Large dropped.

The group means and the summary of the analysis of variance for the Evaluation of Didactic Training scale are presented in Table 5. A main effect for condition was indicated. A comparison of the two high intensity groups with the two low intensity at both the time 1 and time 2 assessments yielded significant differences. High intensity groups scored significantly higher on how they liked and how useful they found their training.

The group means and the analysis of variance summary for the Evaluation of Class Discussion scale are summarized in Table 6. Main effects for time and condition were significant. Relationship, which began next to last, dropped the most over time and ended last; this was the only group to drop significantly.

At the time 2 period the Relationship and Large groups combined were significantly lower than the Action and Small groups. Thus, by the end of the project, Relationship and Large students seemed to both find the class discussions about cases less useful and liked them less.

Table 7 presents the analysis of variance summary and the group means for the Social Support Received scale. A significant main effect for condition is observed. At both time 1 and time 2 assessments, the two high intensity groups combined were significantly higher than the low intensity groups. Large increased significantly over time but still retained the lowest score. A high intensity field experience with weekly meetings seemed to provide the basis for more social support within the class and outside. Small classes also seemed to promote more social support. Perhaps the increase in the Large group over time was accounted for by the fact that Large students got to know each other better over time and could then get more support from each other.

The group means and the analysis of variance table for the Evaluation of Grading Scheme scale are presented in Table 9. A significant interaction of condition and time was observed. There were not any significant between group differences at either time 1 or time 2 assessments. However, at time 2, Relationship and Small liked the grading scheme less and Action and Large liked it more.

In summary, the Action and the Small groups changed less over time in the way they evaluated the field work learning and general experience. Large and Relationship seemed to change the most (negatively) in their evaluation. High intensity groups both evaluated their training experience more favorably than the low intensity groups and both received more social support from their classmates and friends. The Relationship group did not like or find useful the class discussions of the cases, particularly by the end of the project. Finally, within the high intensity groups failures used and liked the outside readings more than the successes at the post period.

Discussion

Course Evaluation

Table 9 presents the rank ordering of the four groups at time 1, which was the assessment period after training was completed, and time 2, the end of course assessment, on each of the six Course Evaluation components. The Action group tended to remain fairly stable over time or to improve its rank. It appears that the experience was positive for them and remained fairly constant or improved over time. Except for their stable position on the component Social Support Received, the Relationship group ended at a lower position at the end of the year than the one in which they began at the end of training. It seems that over time, when compared to the other three conditions, they became less satisfied with the course experience and thus, were less positive in the way they rated the academic course learning, the general course experience, the didactic training, class discussion and the grading scheme. The mean scores of the Small group remained fairly constant over time or dropped nonsignificantly. At time 2 this group had the first or second rank ordering on the evaluation of the academic course learning, the general course evaluation and on the evaluation of class discussion. They were lower on the other three components. The Large group tended to be at or near the bottom and/or to drop in their mean scores over time. This pattern appeared on all of the Course Evaluation components except for the one used to evaluate the grading scheme, which they rated most positively.

As reflected by the findings on the Evaluation of Didactic Training component the two high intensity groups were significantly more positive about the training and intervention model employed than the two low intensity groups. On the component Social Support Received the two high intensity groups combined again scored higher (felt they received more support from fellow classmates and friends about training and their cases) than the low intensity groups. The Large group increased significantly over time, which may be accounted for by the fact that they came to know the students in their class better as the year progressed and could talk with them more.

Conclusions to be drawn from the results discussed above include the following: the Action group tended to feel most positively about the overall field experience; the Relationship group appeared similar to the Action group in terms of their evaluation of the didactic training and the amount of social support received, but they became more negative, seemingly more frustrated, with other aspects of the field experience over time; the Small group was more diverse in its evaluation of field work components, for they were positive concerning half, less positive on the other half; finally the Large group tended to be the most negative. Unlike the Relationship group, which changed over time, the dissatisfaction of the Large group seemed to be their stance throughout most of the field work.

Again, it is important to reiterate that these findings are tentative, due to the nature of the design. However, with this in mind, some applications of these findings for undergraduate educators who are setting up community practica for college students can be demonstrated. McKeachie (1967) talked about group size, stating that in classes where applications of knowledge are important, small groups may be a disadvantage. However, as shown in this study, large supervision groups probably should be avoided, for students feel they learn less, feel class discussion is less useful, receive less support and generally feel more dissatisfied with the field experience. Coupled with this, students are more comfortable and satisfied if they receive frequent and intense supervision. Small groups can provide more intense supervision in time per person; however, frequent meetings are also important. Some (e.g., Durlak, 1971; Korchin, 1976) state that training of nonprofessionals can "wash out" their effectiveness, which is based on their natural skills and enthusiam. From this study though, it is clear that faculty should consider offering extensive training and supervision in a set of specific skills, in order to facilitate the nonprofessional's identification of a specific role for him/herself with the target and his/her environment. In setting up field work supervision in modes such as these, undergraduates seem to be better able to have positive learning

experiences in their initial significant encounters with the very real dilemmas facing psychologists today.

There are many areas in which this study generates unanswered, yet important questions. For example, what is the effect of extensive training by itself? Would such training in a large group cancel out the disadvantages seen here of the large group for supervision? Also, why did those trained solely in relationship techniques feel so differently about the experience from those receiving the same amount of training in behavioral and advocacy techniques? Another interesting area of inquiry concerns the long-term impact of this course experience on the undergraduates. For example, are those participating in the class more likely to have human service positions after they graduate? Are they more likely to be accepted into graduate schools than those who had similar motivation toward the supervision experience, but were not selected? It is crucial that areas such as these receive further systematic research and discussion, in order to keep pace with higher education and the ever-increasing demands for relevance and applicability by today's psychology undergraduates. As stated by Buxton (1951) over 25 years ago, we need improved research on teaching of psychology in order to significantly improve the teaching.

REFERENCES

Albee, G. W. Mental health manpower trends. New York: Basic Books, 1959.

Alexander, J. F., & Parsons, B. V. Short-term behavioral intervention with delinquent families: Impact on family process and recidivism. Journal of Abnormal Psychology, 1973, 81, 2190225.

Baskin, S. Innovations in college teaching. In C.B.T. Lee (Ed), Improving college teaching. Washington, D.C.: American Council on Education, 1967.

Birney, R., & McKeachie, W. J. The teaching of psychology: A survey of research since 1942. Psychology Bulletin, 1955, 52, 51068.

Braukmann, C. J., & Fisxen, D. L. Behavior modification with delinquents. In M. Hersen, R. M. Eisler, & P. M. Miller (Eds.), Progress in behavior modification. New York: Academic Press, 1976.

Brown, W. F. Effectiveness of paraprofessionals: The evidence. The Personnel and Guidance Journal, 1974, 53, 257-263.

Buston, C. E. Teaching: Have your cake and eat it too? American Psychologist, 1951, 6, 111-118.

Carkhuff, R. R. Helping and human relations. Vol. I: Selection and training. New York: Holt, Rinehart and Winston, Inc., 1969.

Cowen, E. L. Social and community interventions. Annual Review of Psychology, 1973, 24, 423-472.

Daniel, R. S., Dunham, P. J., & Morris, C. J. Undergraduate courses in psychology: 14 years later. Psychological Record, 1965, 15, 25-31.

Danish, S. J., & Brock, G. W. The current status of training for paraprofessionals. The Personnel and Guidance Journal, 1974, 53, 299-303.

Danish, S. J., & D'Augelli, A. R. Rationale and implementation of a training program for paraprofessionals. Journal of Professional Psychology, 1976, 7, 38-46.

Danish, S. J., & Hauer, A. L. Helping skills: A basic training program. New York: Behavioral Publications, 1973.

Davidson, W. S. The diversion of juvenile delinquents: An examination of the processes and relative efficacy of child advocacy and behavioral contracting. Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign, 1976.

Davidson, W. S., & Rapp, C. Child advocacy in the justice system. Social Work, 1976, 21, 225-232.

Davidson, W. S., & Rappaport, J. Toward a model for advocacy Values, roles and conceptions from community psychology. In G. Weber & G. McCall (Eds.), Advocacy in the disciplines, New York: Russell Sage, 1977.

Davidson, W. S., & Seidman, E. S. Studies of behavior modification and juvenile delinquency: A review, Methodological critique, and social perspective. Psychological Bulletin, 1974, 31, 998-1011.

Davidson, W. S., Seidman, E. S., Rappaport, J., Berck, P. L., Rapp, N., Rhodes, W., & Herring, J. Diversion program for juvenile offenders. Social Work Research & Abstracts, 1977, 1, 40-54.

DeRici, W. J., & Butz, G. Writing behavioral contracts. Champaign, IL.: Research Press, 1975.

Durlak, J. The use of nonprofessionals as therapeutic agents: Research, issues, and implication. Unpublished doctoral dissertation, Vanderbilt University, 1971.

Durlak, J. A. Comparative effectiveness of paraprofessional and professional helpers. Psychological Bulletin, 1979, 86, 80-92.

Edmondson, J. B., & Mulder, R. J. Size of class as a factor in university instruction. Journal of Educational Research, 1924, 9, 1-12.

Feldhusen, J. F. The effects of small and large group instruction on learning of subject matter, attitudes and interests. Journal of Psychology, 1963, 55, 257-262.

Goodman, G. Companionship therapy: Studies of structural intimacy. San Francisco: Jossey-Bass, 1972.

Gordon, T. Parent effectiveness training. New York: Peter H. Wyden, 1970.

Gruver, C. G. College students as therapeutic agents. Psychological Bulletin, 1971, 76, 111-127.

Hetherington, H., & Rappaport, J. Homecoming: A volunteer program to rehabilitate chronic patients. Hospital and Community Psychiatry, 1967, 18, 171-174.

Hudelson, E. Class size at the college level. Minneapolis: University of Minnesota Press, 1928.

Husband, R. W. A statistical comparison of the efficacy of large vs. smaller recitation sections upon achievement in general psychology. Journal of Psychology, 1951, 31, 297-300.

Kantrowitz, R. E. Training nonprofessionals to work with delinquents: Differential impact of varying training/supervision intervention strategies. Unpublished doctoral dissertation, Michigan State University, 1979.

Kantrowitz, R. E., Davidson, W. S., Blakely, C., & Kushler, M. The effects of training/supervision on nonprofessional interventions with delinquents. Paper presented at the 86th Annual APA Convention, Toronto, 1978.

Keller, F. S. PSI. The Keller Plan Handbook: Essay on a personalized system of instruction. Menlo Park, Ca: W. A. Benjamin, 1974.

Korchin, S. J. Modern clinical psychology: Principles of intervention in the clinic and community. New York: Basic Books, 1976.

Kulik, J. A. Undergraduate education in psychology. Washington, D.C.: American Psychological Association, Inc., 1973.

Linden, J. I., & Stollak, G. E. The training of undergraduates in play techniques. Journal of Clinical Psychology, 1969, 25, 213-218.

Maier, N. R. F. Innovation in education. American Psychologist, 1971, 26, 722-725.

Macomber, F. G., & Siegel, L. Final report of the experimental study in instructional procedures. Oxford, Oh.: Miami University, 1960.

McKeachie, W. J. Teaching tips: A guidebook for the beginning college teacher. Ann Arbor: George Wahr Publishing Co., 1965.

McKeachie, W. J. Research in teaching: The gap between theory and practice. In C. B. T. Lee (Ed.), Improving college teaching, Washington, D.C.: American Council on Education, 1967.

Nietzel, M. T., Winett, R. A., MacDonald, M. L., & Davidson, W. S. Behavioral approaches to community psychology. New York: Pergamon Press, 1977.

Poser, E. G. The effects of therapists; training on group therapeutic outcome. Journal of Consulting Psychology, 1966, 30, 283-289.

Rappaport, J. Community psychology: Values, research and action. New York: Holt, Rinehart and Winston, 1977.

Rappaport, J., Chinsky , J. M., & Cowen, E. L. Innovations in helping chronic patients: College students in a mental institution. New York: Academic Press, 1971.

Report of the Joint Commission on the Mental Health of Children. Crisis in child mental health: Challenge for the 1970's. New York: Harper & Row, 1969.

Riessmen, F. The helper therapy principle. In B. G. Guerney (Ed.), Psychotherapeutic agents: New roles for nonprofessionals, parents and teachers. New York; Holt, Rinehart and Winston, 1969.

Rogers, C. The necessary and sufficient condition of therapeutic personality change. Journal of Consulting Psychology, 1957, 21, 95-103.

Rogers, C. On becoming a person. Boston: Houghton-Mifflin, 1961.

Scheier, I. H., & Goter, L. P. Volunteers in court: A manual. Washington, D.C.: U.S. Department of Health, Education, and Welfare, 1971.

Seidman, E. S., & Rappaport, J. The educational pyramid: A paradigm for research, training and manpower utilization in community psychology. American Journal of Community Psychology, 1974, 2, 119-130.

Seidman, E. S., Rappaport, J., Davidson, W. S., & Linney, J. Changing human service systems: Interventions with children, adolescents, adults, and the elderly. New York: Earlbaum, in press.

Sobey, F. The nonprofessional revolution in mental health. New York: Columbia University Press, 1970.

Stuart, R. B. Behavioral contracting within the families of delinquents. Journal of Behavior Therapy and Experimental Psychiatry, 1971, 2, 1-11.

Tharp, R. G., & Wetzel, R. J. Behavior modification in the natural environment. New York: Academic Press, 1969.

Truax, C. B., & Carkhuff, R. R. Toward effective counseling and psychotherapy: Training and practice. Chicago: Aldine, 1967.

Wolfle, D. G. The first course in psychology. Psychological Bulletin, 1942, 39, 685-712.

Table 1

Design

Condition	Time 1 (10 week)	Time 2 (30 weeks)
Action	Course Evaluation	Course Evaluation
Relationship	Course Evaluation	Course Evaluation
Small	Course Evaluation	Course Evaluation
Large	Course Evaluation	Course Evaluation

Definition of Condition

	Content	Group Size	Intensity of Supervision
"Action"	behavioral contracting/ advocacy	small	once a week
"Relationship"	relationship building	small	once a week
"Small"	natural skills	small	once a month
"Large"	natural skills	large	once a month

Table 2

Course Evaluation
Principal Components Solution

:V	% Var		Variable	Eval. of Academic Course Learning Factor 1	General Course Evaluation Factor 2	Eval. of Didactic Training Factor 3	Eval. of Class discussion Factor 4	Social Support Received Factor 5	Eval. of Grading Scheme Factor 6	h^2
42	27.9	1	Take Again	.28	.81	.24	.14	-.01	-.05	.82
79	12.1	2	Recommend	.11	.78	-.14	.16	-.10	.13	.69
50	10.9	3	Relevant-Career Goals	.66	.39	.06	-.08	-.16	.30	.71
89	8.2	4	Initial Expect.	.08	.70	.22	.14	.07	-.06	.57
47	6.4	5	Learned	.75	.21	.09	.11	.10	-.25	.70
32	5.8	6	Learned Compared to Others	.72	-.12	.27	.39	-.06	.18	.80
99	4.3	7	Useful in Future Courses	.73	.06	.29	.14	.26	-.06	.72
85	3.7	9	Effect-Job	.56	.29	.42	-.12	.01	.22	.65
74	3.2	10	Effect-Grad. Sch.	.65	.31	.18	-.19	.09	.03	.60
60	2.6	11	Like Model-Interv.	.13	.44	.71	.01	.04	.08	.72
57	2.5	12	Like Amt. Train'g	.24	.09	.78	-.19	.13	-.00	.73
53	2.3	13	Like Training Presentation	.24	.63	.11	-.03	.16	.31	.58
43	1.9	14	Talk w/Friends Regard. Training	.41	.04	.11	-.08	.63	-.42	.75
36	1.5	15	Talk w/Students Regard. Training	-.06	-.10	.07	.03	.85	-.06	.75
32	1.4	16	Talk w/Friends Regard. Case	.26	.03	.10	-.06	.73	.17	.64
28	1.2	17	Talk w/Students Regard. Case	-.10	.13	.10	.15	.81	.19	.76
21	.9	18	Like Grades	.06	.13	.01	.12	.15	.86	.79
19	.8	19	Like Class Discussion-Yours	.12	-.08	-.06	.82	.07	.00	.71
15	.7	20	Useful Class Disc-Yours	-.02	.16	.27	.81	.03	.07	.76
14	.6	21	Like Class Discussion-Others	-.01	.20	-.09	.66	.07	-.34	.81
11	.5	22	Useful Class Disc-Others	-.03	.29	.12	.68	-.06	.22	.62
07	.3	23	Like Role Plays	.17	-.01	.80	.38	.12	.03	.82
06	.3	24	Useful Role Plays	.31	-.00	.71	.32	.13	-.10	.74

Table 3

Course Evaluation: Evaluation of Academic Course Learning Scale

	Time 1	Time 2
Action	4.08	4.07
Relationship	3.92	3.65
Small	3.88	3.92
Large	3.65	3.39

Course Evaluation: Evaluation of Academic Course Learning Scale

Analysis of Variance

Source	Df	MS	F	Prob.	ω^2
Condition	3	1.57	2.82	.05	.07
Subject	51	.56			
Time	1	.42	2.42	.13	
C x T	3	.18	1.00	.40	
S x T	51	.18			

Table 4

Course Evaluation: General Course Evaluation Scale

	Time 1	Time 2
Action	3.87	3.89
Relationship	3.91	3.58
Small	4.19	3.85
Large	4.18	3.83

Course Evaluation: General Course Evaluation Scale

Analysis of Variance

Source	Df	MS	F	Prob.	ω^2
Condition	3	.43	.53	.66	
Subject	51	.80			
Time	1	1.72	5.12	.03	.02
C x T	3	.22	.67	.58	
S x T	51	.34			

Table 5

Course Evaluation: Evaluation of Didactic Training

	Time 1	Time 2
Action	3.66	3.89
Relationship	3.83	3.50
Small	3.29	3.07
Large	3.00	2.57

Course Evaluation: Evaluation of Didactic Training

Analysis of Variance

Source	Df	MS	F	Prob.	ω^2
Condition	3	5.97	8.21	<.005	.22
Subject	51	.73			
Time	1	.96	3.34	.07	
C x T	3	.61	2.12	.11	.01
S x T	51	.29			

Table 6

Course Evaluation: Evaluation of Class Discussion

	Time 1	Time 2
Action	4.75	4.38
Relationship	4.40	3.92
Small	4.66	4.43
Large	4.38	4.12

Course Evaluation: Evaluation of Class Discussion

Analysis of Variance

Source	Df	MS	F	Prob.	ω^2
Condition	3	1.13	2.70	.05	.05
Subject	51	.42			
Time	1	3.03	11.22	.02	.07
C x T	3	.08	.30	.82	
S x T	51	.27			

Table 7

Course Evaluation: Social Support Received

	Time 1	Time 2
Action	3.16	3.43
Relationship	2.94	2.81
Small	2.50	2.61
Large	2.06	2.52

Course Evaluation: Social Support Received

Analysis of Variance

Source	Df	MS	F	Prob.	ω^2
Condition	3	5.35	6.80	.001	.18
Subject	51	.79			
Time	1	1.00	2.99	.09	
C x T	3	.40	1.20	.33	
S x T	51	.34			

Table 8

Course Evaluation: Evaluation of Grading Scheme

	Time 1	Time 2
Action	3.79	4.29
Relationship	4.42	3.83
Small	4.14	3.71
Large	4.27	4.47

Course Evaluation: Evaluation of Grading Scheme

Analysis of Variance

Source	Df	MS	F	Prob.	ω^2
Condition	3	1.02	.67	.58	
Subject	51	1.53			
Time	1	.08	.15	.70	
C x T	3	1.77	3.32	.03	.03
S x T	51	.53			

Table 9

Course Evaluation
Rank Orderings

	Evaluation of Academic Course Learning		General Course Evaluation		Evaluation of Didactic Training		Evaluation of Class Discussion		Social Support Received		Evaluation of Grading Scheme	
	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2
Action	1	1	4	1	2	1	1	2	1	1	4	2
Relationship	2	3	3	4	1	2	3	4	2	2	1	3
Small	3	2	1	2	3	3	2	1	3	3	3	4
Large	4	4	2	3	4	4	4	3	4	4	2	1

	Average Rank	
	Time 1	Time 2
Action	2.17	1.33
Relationship	2.0	3.0
Small	2.5	2.5
Large	3.33	3.17